Thurso McCulloch

DESIGN

THE LIBRARY OF CONGRESS SERIAL RECORD
JUN 8 - 1949
Copy 1

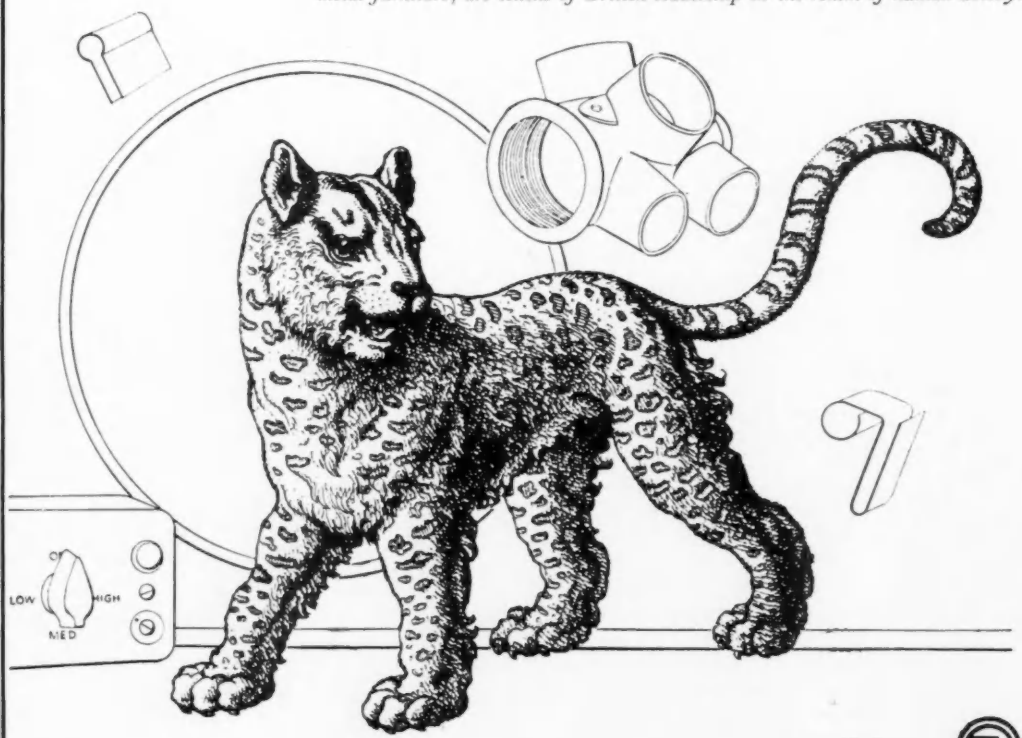
A MONTHLY JOURNAL FOR MANUFACTURERS AND DESIGNERS

No 4 · APRIL 1949 · ISSUED BY THE COUNCIL OF INDUSTRIAL DESIGN

The fable of the logical leopard

A Young Leopard came back to his forest from a tour of the civilised world. " Mankind," he declared, " is restless, bald, unhealthy, obstinate, short-sighted, spindle-shanked, intemperate, verbose and inquisitive, forever troubling its brains and fingers. I saw nobody as beautiful as myself." " And what did you learn ? " asked his friends. " Nothing whatever ! " said he. " After all, I'm only a leopard."

Man, whatever his defects, has resources denied to every other creature. When he neglects them, he fails : when he uses them, he has a chance to flourish. And the things that TI make, from huge pressure vessels to complex precision tubes, from parts of aeroplanes to complete bicycles, from paints to wrought aluminium alloys, electric irons to metal furniture, are tokens of British leadership in the realm of human ability.



TUBE INVESTMENTS LIMITED · THE ADELPHI · LONDON · W.C.2

DESIGN

NUMBER FOUR · APRIL 1949

A MONTHLY JOURNAL for industry, issued by the Council of Industrial Design and by the Scottish Committee of the Council. *Editor:* ALEC DAVIS

Editorial Address: Tilbury House, Petty France, London SW1

Telephone: Whitehall 6322 *For subscription details see p.* 24

CONTENTS

DESIGN . . . A TEAM JOB *A. Whitaker* 2

DESIGN FOR SERVICE (*Report from USA*) 6

THEY SAID 10

THREE IDEAS FOR NEW FURNITURE 12

POST-WAR SHOP (*Dunn's*) 20

NEWS OF NEW PRODUCTS 11, 14–19

DESIGN AND PRODUCTION 21

NOTEBOOK 23

Cover picture: McMichael radio set: see p. 14

"Contemporary idiom"

IN THE ANNOUNCEMENT by the Council of Industrial Design of the 1951 Stock List the expression "contemporary idiom in design" was used. The announcement, it will be remembered, called upon British industry to contribute, to a photographic card-index, examples of those current products that manufacturers and designers are themselves most proud of; it was explained that the Stock List was to provide the people whose duty is to translate the Festival Theme into terms of display with their most fruitful source of material. It was the intention to confine exhibits to *the contemporary idiom in design.*

This expression has been accepted without a tremor, as the natural and obvious thing, by industries as different as the clothing or the packaging industries on the one hand, and those making scientific instruments, machine-tools or aeroplanes on the other. But between these extremes there is a range of industries —pottery and textiles, amongst others—in which the phrase has been criticised. We feel, therefore, that some reassurance and a definition are required.

It is not intended to confine exhibits in the Festival of Britain to the taste of a minority for geometrical, abstract, formal or "functional" designs. But neither is it the intention to promote designs for the Festival whose chief claim to attention is faithful reproduction of the manner of bygone ages. That would be contrary to the Festival policy. Other countries know well that this country has a glorious past; we need to convince them that we are fully alive to the present and have an equally glorious future.

We wish to see goods that show interesting contemporary developments; for example, the English floral tradition in textile prints should certainly have a place in the Festival; examples can be found which carry on the tradition and add to it something belonging to the present age, instead of merely reproducing the success of past centuries. There should be no striving after novelty for its own sake. There are products like the Windsor chair or Harris tweed or conventional pottery shapes which are as valid today as they ever were. It would be as absurd to discard the use of wood, wool and clay because we now have plywood, rayon and plastics.

It is the Council's aim to make the Stock List broad and comprehensive, not exclusive, in taste whilst at the same time maintaining its contemporary character. We hope British industry will enable us to demonstrate, in the Festival of Britain, that the principles of good design are widely understood here. Such a demonstration would pay dividends in years to come. *M. H. T.*

Museums and industrial design

"IT WOULD SEEM that our museums should be more rounded if they wish to handle the stuff of modern life, and that industrial designers need to consider what excellence of appearance has meant over the ages, before a really working relationship can be established between them." Thus Mr Edgar Kaufmann, Jr, Head of the Department of Industrial Design in the Museum of Modern Art, New York, in a recent address at the Royal Society of Arts. Despite the divine discontent apparent in the words quoted above, he showed that this Museum is doing much to educate public taste in selecting everyday things; he referred particularly to its "most widely influential device," the exhibitions of low-priced *useful objects* of good design.

The effectiveness of these exhibitions has been shown in three ways: **1**, during the war the Museum was asked to discontinue them because they "incited people to purchase non-essentials"; **2**, shops sell out of some of the items displayed every time such an exhibition is held; **3**, museums in other parts of the United States have started to put on similar shows. Twelve were held last winter, and in Minneapolis the Walker Art Centre now has a permanent display on the same lines, also issuing a quarterly pamphlet which illustrates and explains the Centre's selections.

We hope that national pride will not deter museums in Britain from following an excellent Transatlantic example.

Design in Industry is a team job . . .

By *A. WHITAKER*, OBE, MA, MIEE, FInstP

—who argues that for every consultant designer, there should be a dozen designers employed in industry

DESIGN IS ESSENTIALLY the accomplishment of a team, not of an individual. To take their proper place in industry, designers must be as expert in the modes of operating in teams under factory conditions as in mechanical and aesthetic techniques. The team of technicians is essential, since knowledge of all the processes involved in manufacture cannot be fully acquired by any one man.

The team leader will be chosen for his paramount quality of leadership, for his sufficient knowledge of the techniques used by the team and for his capacity to co-ordinate its activities. He must have practical knowledge, based on experience, of the organisation of *development*—as the term is understood in modern industry—and of its translation into *production*.

Most people are aware of a deterioration of product quality which has taken place with the advance of mechanisation; aware, too, that it has been due to the absence, in the teams which grew up to replace the old designer-craftsman, of one element of good design. Mechanical techniques developed at a headstrong pace; the fact that quality demanded considerations other than mechanical ingenuity was forgotten. For many decades the "missing technician" was scarcely missed. Today, the problem of improved industrial design is the problem of re-introducing into design teams an element that has become foreign to them. Every effort which is made to further the cause of design in industry must be judged by its success or failure in helping to effect this re-introduction.

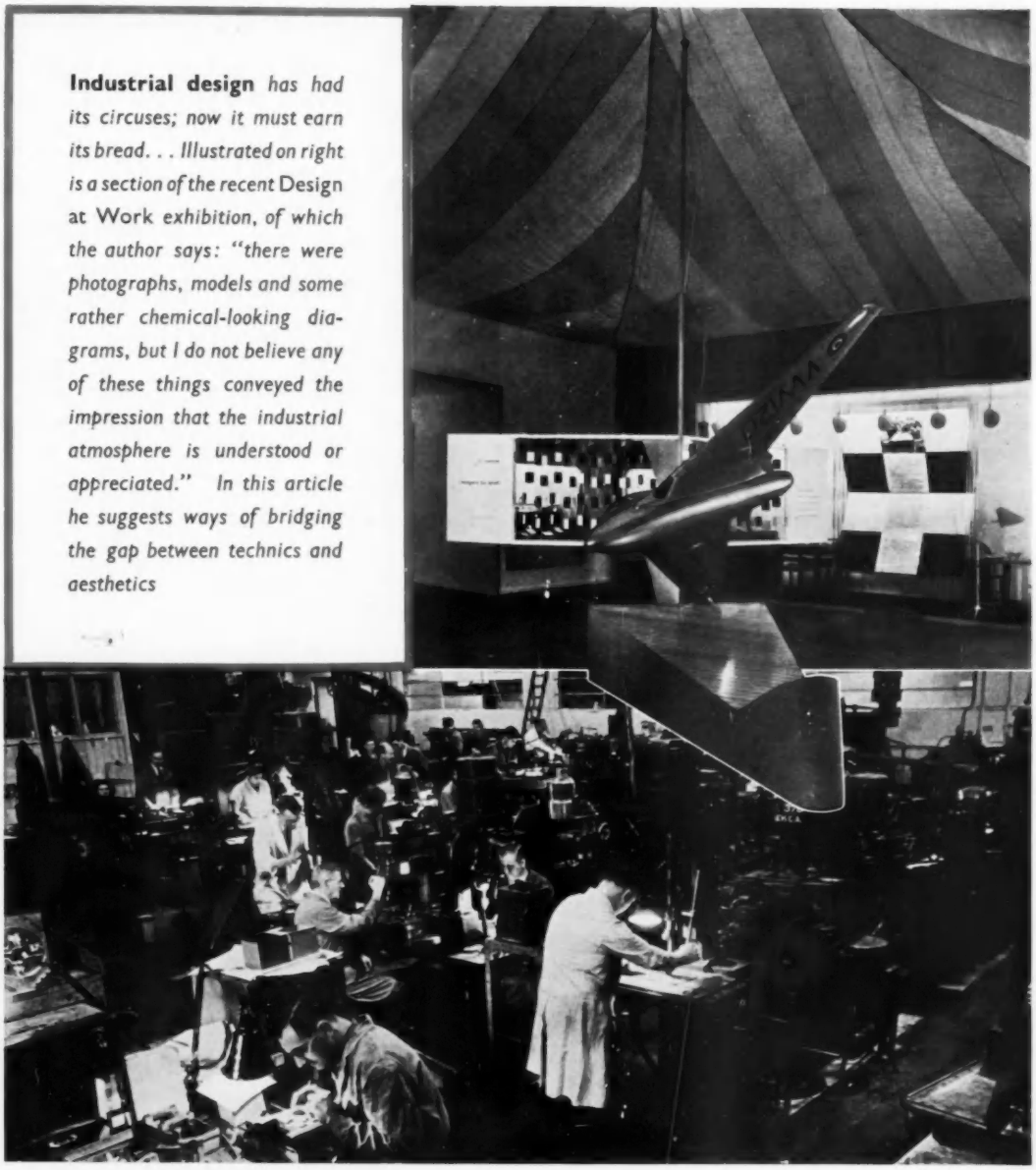
Two steps must be taken, and taken soon. First, technicians must be awakened to the significance of aesthetics in everyday life. The effect of propaganda and of the efforts of many isolated individuals within industry is beginning to be noticeable, but it is time that the formal education of engineers and draughtsmen took account of this need.

The second step is for the *aesthetic* technicians. They must demonstrate their ability and their willingness to operate as members of a team. They must acquire something of the techniques employed by their mechanical colleagues; they must know and conform to the ways which have grown up in mechanical-design organisations during the century of their development; and they must demonstrate their understanding of the organisation of design in industry. *They cannot pull their weight in industry from the outside; they must get in and work from within.*

Manufacturers generally are well aware of the complexities attendant on the conception and birth of a new product. They know that it involves a long sequence of trials and errors, with compromises between engineers, draughtsmen, tool designers, process experts, material buyers, salesmen and service engineers. They would welcome improvement of their products by the addition of new experience and talent to that struggling team—but they will mistrust, to the point of disbelief, any suggestion that by employing a new type of individual the processes of design can be entirely revolutionised.

Industrial designers must attune themselves to these realities. They must avoid giving the impression that their efforts are effortless, that their art is magic. It is always a temptation to make a great achievement look simple; the real achievement of designers should not be the product they design so much as the attainment of proper consideration for their ideas in relation to other requirements. That is the service

Industrial design *has had its circuses; now it must earn its bread. . . Illustrated on right is a section of the recent* Design at Work *exhibition, of which the author says: "there were photographs, models and some rather chemical-looking diagrams, but I do not believe any of these things conveyed the impression that the industrial atmosphere is understood or appreciated." In this article he suggests ways of bridging the gap between technics and aesthetics*



E. K. Cole Ltd

they have to sell, and the way to sell it is not to try and make it look easy to people who are fully aware of its difficulty. They must emphasise that they aim to augment the team, not to supplant it.

Today there are probably more industrial designers (in the current sense of the term) working as consultants for industry than there are permanently employed in it. This is an unsound foundation both for them and for industry. Consultant designers have the same value as consultant engineers and should operate through design teams complete in themselves. For every consultant there should be a dozen designers permanently employed in industry, in development departments, drawing offices and factories.

(*Continued overleaf*)

DESIGN IN INDUSTRY IS A TEAM JOB: **This chart shows the importan**f the

1

THE IDEA

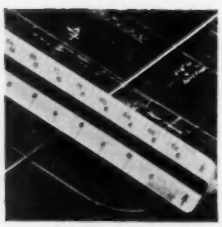
comes from the firm's Design and Development Committee.

This consists of the Development Director, *chairman*; and the following *members*— technical engineer, development engineer, sales/works liaison officer and the designer

2

DRAWINGS

Both perspective drawings and rough layouts, to settle the proportions and general appearance, are made for submission to the directors by the designer



3

PROTOTYPE

This is prepared in the Design Drawing Office and Development Workshop—involving liaison between technical engineer, development engineer, material controller, purchase department, works manager and designer

4

TESTS

The firm's technicians and demonstrators carry out practical trials which may necessitate modifications by the designer.

When the performance is found in this way to be satisfactory there follow . . .

(*Continued from previous page*)

To get these qualified aesthetic technicians into industry, men must be appropriately trained. A beginning is being made of that. They must receive their share of recognition and publicity, *not as individuals, but* (*as their brothers, the engineers, do*) *as a profession*. Their professional status, their education and qualifications must be defined and accepted by industry.

Regrettably, much propaganda on behalf of design fails to suggest that designers realise that they must, in the main, work from within industry instead of shining upon it from without (and perhaps a little above). The reaction of manufacturers to exhibitions like *Design at Work* may be that, while the *Design* is undoubtedly excellent, the *at Work* seems to pay lip-service to the realities of industrial team-work without carrying much conviction. True, there were in

f the designer's contribution at every stage from idea to finished product

5

DESIGN APPROVAL MEETINGS

FIRST to gain *Sales* approval

SECOND to gain *Works* approval

At the latter are present the works manager, material controller, all departmental managers concerned in manufacture of the new product —who discuss their own aspects of production with the designer

6

PRODUCTION PLANNING

The prototype (modified as necessary after stages 4 and 5) is handed over to the production manager to enable him

(a) to decide on the best breakdown of the product into sub-assemblies;

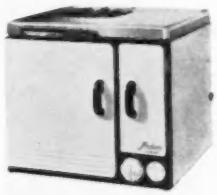
(b) to subject the job to time-study, etc,

in consultation with the designer

7

WORKING DRAWINGS

Model, drawings, sketches and materials schedule are handed over to the Production Drawing Office for preparation of necessary working drawings



Production Model: *a portable electric cooker designed especially for use in houses shared by more than one family.*

8

TOOLING-UP FOR PRODUCTION

At this final stage before production— as at all the earlier stages—the designer must be prepared for any queries that may arise from other departments

For the facts embodied in this chart, showing stages in the design-development of a new light engineering product, we are indebted to Mr J. W. Buckingham, Head of Electrical Design Department of the Jackson Electric Stove Company Ltd. The product on which the chart is based is the Jackson *Giant* cooker, illustrated on left.—EDITOR

that exhibition some photographs of works conferences, some models illustrating stages in design, and some rather chemical-looking diagrams showing various industrial personnel in a pattern. But I do not believe any of these things conveyed the impression that the industrial atmosphere is understood or appreciated. None would ram home to a manufacturer that the activities of the designers represented concerned him, or were applicable to his organisation. The picture presented by many such exhibitions bears the same relation to reality as a still-life to a market stall.

Few manufacturers, visiting Burlington House, would have said: "That's how my lads work—but I wish they made as good a job of it. Now, how can I . . .?" Yet, if the truth were shown, industrial designers would get their chance to work inside industry as is their due and duty.

One of the great power houses of TVA. Beyond human scale (see figure) but trim, shipshape, spotlessly clean and fine in colour—pompeian red casings, cream tile floor and a hint of blue in the stair rails

DESIGN FOR SERVICE

—or for artificial obsolescence?

THE TWO AMERICAS . . . AS AN ENGLISH DESIGNER SEES THEM

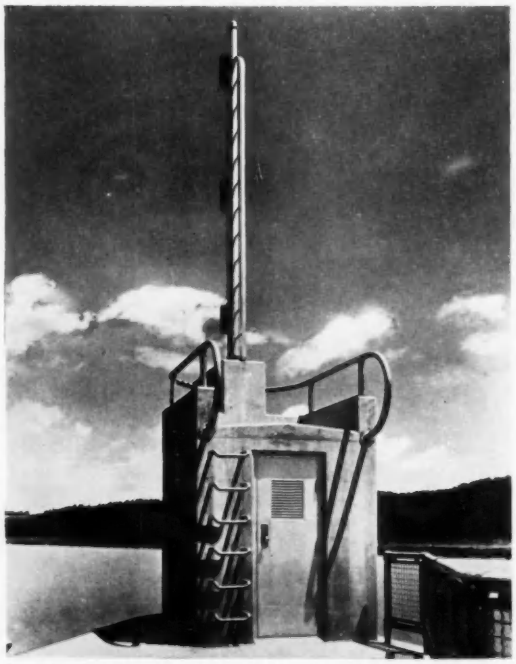
RECENTLY I WAS fortunate enough to spend three days looking at the work of Tennessee Valley Authority. It was a most rewarding experience. Here on an immense scale—the 700-mile-long basin of a great river—was a most successful experiment in co-ordinating the efforts of many specialists in order to raise the standard of life of the whole valley. The specialists included engineers, architects, agriculturists, town planners, industrial designers.

It is of the latter that I wish to speak particularly, but their work must be viewed in relation to the background. Before Roosevelt came into power in 1932, the region had been subject to very serious and repeated flooding in certain areas; the indiscriminate cutting of trees and bad farming practice had caused widespread erosion of top soil, which again silted up the river and made it of little value as a means of transport; electricity was not available in most rural areas, housing was very bad and the education of the "poor whites" left much to be desired. Under such conditions it is little wonder that the preoccupation over providing tomorrow's breakfast made long-term planning seem like a castle in Spain.

Then suddenly TVA sprang into existence. At first, local people regarded it with considerable suspicion, but it was fortunate enough to be championed by President Roosevelt, nursed and encouraged by Senator Morris, and guided by David Lilienthal—a man of the widest vision who saw that the enthusiastic collaboration of the inhabitants of the area was essential to TVA's success. He therefore set out to show how design might enter into people's lives and greatly enrich them in every way. The great power-houses on the new dams are well designed; they give one a feeling, rare in engineering projects, that they have been considered as parts of an organic whole, down to details such as electric-light fittings, lettering and the very lovely colour schemes of the great machinery halls. Even temporary housing for those engaged on construction work was well designed and well laid out. Moreover, sightseers are welcomed—guides, car-parks, picnic grounds, seats and shelters are provided for them—and a visitor would have to be obtuse indeed not to sense the feeling of social responsibility which informs the widespread activities of Tennessee Valley Authority.

That was one of the Americas. Then, from the bright clear sunlight of Tennessee and North Carolina, I went to Pennsylvania, New England and New York. I had an opportunity of talking to many business men in these areas and I was startled to find, first, that hardly any of them had taken the trouble to go and look at the work of TVA; second, that almost without exception they were bitterly hostile to it. A strong believer in private enterprise myself, I nevertheless feel that the aggressive and rugged individualism which we boasted in the nineteenth century and which persists in America has many faults. In spite of the considerable efforts of the New Deal, there is to my mind less sense of social responsibility in American than in British industry.

A condition to which American civilisation is susceptible—to which, indeed, any industrialised civilisation becomes ever more susceptible—is the mistaking of means for ends. In Giedion's *Mechanization takes Command* is a survey of mechanical development in meat packing, in harvesting and in making bread. As all three are basic and relatively stable industries dealing with an essential human requirement—food—their importance is obvious; yet in each the engineering problems involved have been so considerable that means of production have been mistaken for end-products. In making bread, for example, an awkward pause in mechanised production was caused by waiting for the yeast to work. So all the hell-instructed zest of single-minded inventors was poured into finding a possible solution. Pumping carbonic-acid gas into the dough proved one of the least offensive methods. The result in New York is that fewer bakers work at night, that conditions are no doubt impeccably hygienic, that with faultless regularity an unbelievable number of rolls of absolutely identical size, weight, colour and texture fall off the moving



Signalling equipment. The railing would be heavy on an isolated building, but this must be thought of as part of a mile-long group. Note TVA standard door.

There must be many efficient ways of spanning such a roof in steel or concrete, but few would have the grace of this cambered roof in welded steel. Here one senses the collaboration of engineer and architect. A giant crane runs on rails above the tiled walls.

belt, neatly wrapped in Cellophane. Only a curmudgeon would be so heartless as to insist that not one of them has any taste at all, and little nourishment. . . .

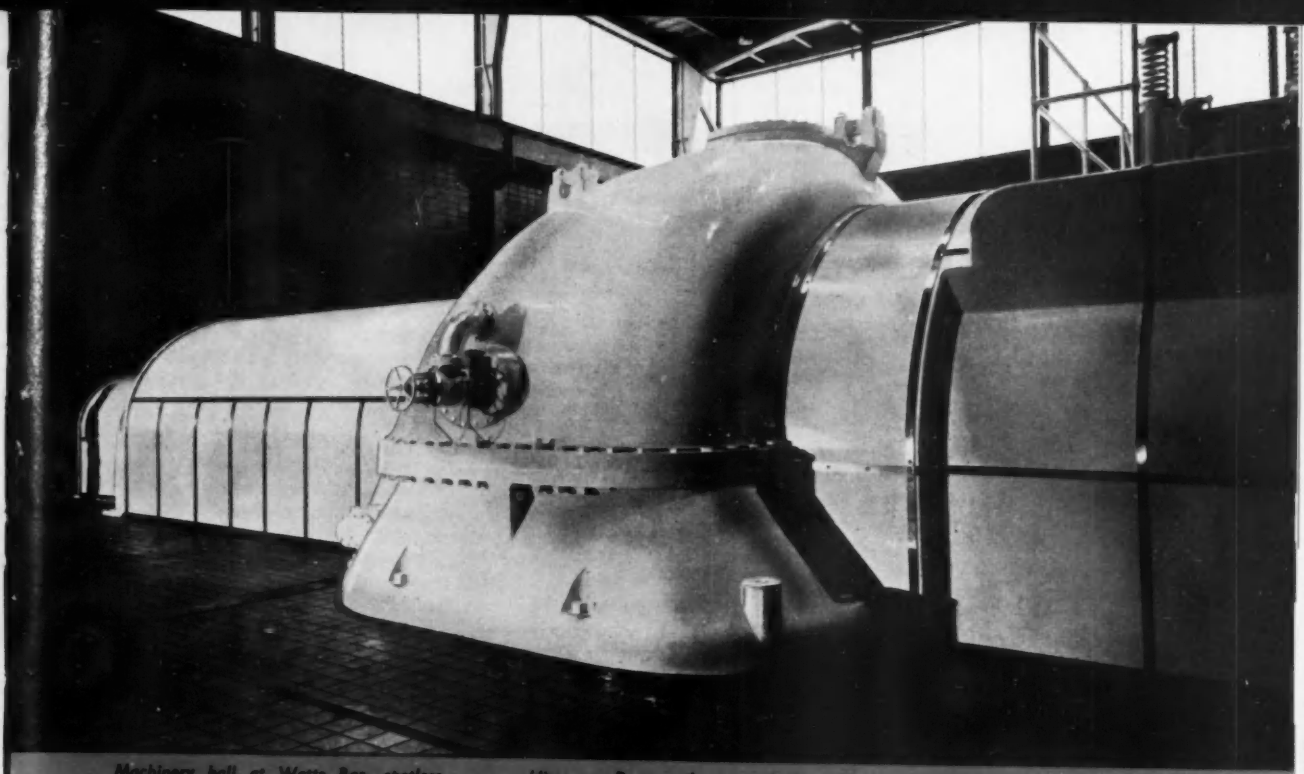
This *other* America, the America of talented, imaginative, yet single-minded engineers tends to become more interested in techniques of production than in articles produced. Ask a member of the board of many companies, "What do you make?" and he will tell you with pride how many million dollars they "made" last year. Press the question, and he will expatiate on his firm's miles of conveyor belt. Seldom will he dwell on the article.

It is not surprising that, to match his astonishing ingenuity in production, he has called in the supersalesman to shift the goods off his hands. Again there is concentrated attention, this time on *sales*: the goods themselves may well seem less important than the packaging which houses them; which, it is hoped, will catch the customer's eye. Not for one moment do I suggest that packaging is unimportant—in my opinion it has been much neglected in England. But one must have a sense of proportion. Unfortunately, much industrial design in America is linked so closely to aggressive advertising that it tends to conform to a pattern which leads to immediate sales—instead of building goodwill by adopting a high standard. "Find out the lowest common denominator of design that most people will buy, and that is what to make." It is a simple creed, not unknown here.

But, just as I believe that few British manufacturers today would build back-to-back housing for their workers even if they were free to do so, I firmly believe also that most of them are jealous of standards of quality, though they might be able to make more money *immediately* by lowering their standards. The hope for the future of design lies in the growing realisation that it is an element of quality—that design must receive at least as much consideration as workmanship and material. Sales cannot be maintained, let alone expanded, unless first things come first. I hope British manufacturers, in spite of all blandishments, will keep their eye on the goods . . . and let it be a design-conscious eye!

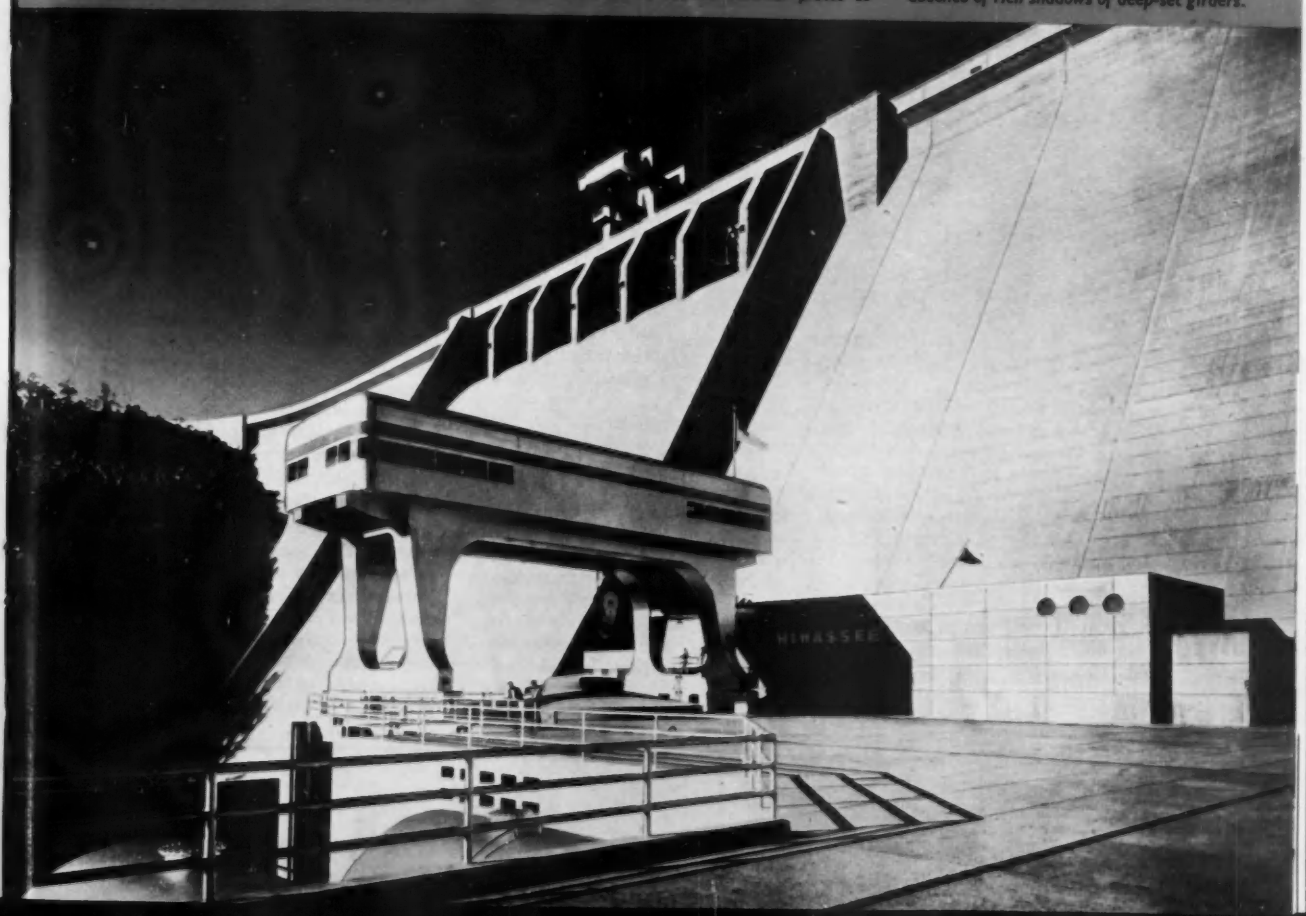
In Britain we have neither the material nor the labour to design for artificial obsolescence; we must design for consumption and not for what Mr Hartland Thomas calls galloping—or is it Gallup-proof?—consumption. The question I am posing is whether even in America, taking the long view, *design for artificial obsolescence* instead of design for service will not lead to a great increase of state control.

It will be a matter of concern all over the world to see whether American industry accepts the challenge of TVA by growling or by putting its own house in order and determining to do even better. We in Britain have the same problem, though not yet so dramatic an experiment. *G. R.*



Machinery hall at Watts Bar—spotless, despite the use of pulverised soft coal. Generator casings are cream; walls, blue tiles; roof, grey concrete.

Hiwassee Dam and power house. The crane is not up to TVA design standards. One loses the tautness of steel when the construction is hidden beneath plates so that the form looks as if it should be in concrete. Styled decoration over the control room windows does not make up for the absence of rich shadows of deep-set girders.



They said...

Points from recent speeches on many aspects of industrial design

John Gloag *at the Royal Society of Arts:*

We are struggling, though not strenuously, against the reputation we have acquired for repeating the things that we have done so well in the past. Few people are conscious of the need for shaking off this dependence upon the past. Some industrialists are, and most designers; but because the first Industrial Revolution encouraged imitativeness, we have inherited a habit of mind from the nineteenth century that has brought ease and comfort to hundreds of manufacturers and traders for some generations, because it has saved them from the hardest forms of work in the world —thinking and selling.

The creative capacity for industrial design that exists in our country could, if confidently and consistently used and sincerely and effectively presented, bring to Great Britain a reputation for imaginative leadership that would be comparable with our reputation, earned in the past and maintained to this day, for excellent workmanship.

Richard Lonsdale-Hands *at the Design and Industries Association:*

With few exceptions British manufacturers seem to have lost initiative since the war. I think the fact that so many inefficient manufacturers have been kept in business (because of the effect of quotas) when they should have gone out of business, has not helped to develop the initiative of the more competent firms who have seen no reason to be more enterprising than is necessary. This has not helped to get the voice of industrial design into its true pitch.

Edgar Kaufmann *at the Royal Society of Arts:*

In art museums, industrial design often finds itself rubbing shoulders with quite simple objects that require little engineering and little capital investment and all these things are compared and evaluated as if they were equal. Yet exactly equal they are not; one kind of product enjoys certain advantages, another enjoys different ones. On the whole, the industrially produced articles tend to be quite exciting. . . . Yet there is coarseness and banality in most of these machine products. Only delicate instruments or the most ordinary utilitarian bits achieve a free or elegant look. The average is infected with a specious vulgarity which effectively draws attention in the market place. Industrial design shows neither the humble tact of craftsmen's fingers, nor the refined forms that satisfy sophisticated purchasers. *See also p. 1*

Vivian Ridler *at the Young Master Printers' Conference:*

Among the many specialists employed in the printing industry, the designer has rarely been included. Through his neglect of the designing function the average printer is neither completely master of his craft, nor completely master in his own house. . . . If we are to raise the general standard of print throughout the industry this question of style and design must not be allowed to go by default. . . . The right approach depends mainly on size. If the business is a really small one the employment of a whole-time typographer is out of the question. . . . In a larger business it should be possible to make a separate section which would concern itself with copy preparation, layout and general design work.

HOW DESIGN CAN CUT PRODUCTION COSTS

Three examples quoted by Milner Gray RDI at the RSA

In considering the design of a domestic wringer, during the preliminary stages it was realised that unless the toothed wheels, usually fitted in almost every contemporary design, performed the normal function of gears—that is, to increase the speed of rotation of the rollers—they might well prove under test to be unnecessary, since the friction resulting from the contact of one rubber roller upon the other under efficient spring tension, when one roller only is operated by the winding handle attached to it, would be more than sufficient to ensure the rotation of the other at the same time. The danger of slip between the rollers would become less as the thickness of the clothes passing between them increased. In the new design therefore the gears were omitted. . . . A not inconsiderable saving in labour and material was thus effected.

A similar departure from tradition, in the design of a special optical unit, was found possible when considering the unit in the early stages. The mechanical drive of certain parts of the machine has always depended on a complicated pulley and belt system, not only involving considerable maintenance cost through breakages of the belt but also considerable loss of power in transmission through slipping of the belt on pulley wheels. After research into the possibility of using an entirely new form of transmission, it was found that it could be considerably simplified by using a flexible shaft drive from the power unit to the necessary components to be driven. This, under test, proved extremely successful, production and maintenance costs being considerably reduced.

In the redesign of a dry cleaning plant, it was necessary to encase a large portion of the main unit which was supported by four rather complicated and ugly legs. In this instance the end plates of the unit were extended downwards to act as supports for the machine and we were able to discard the legs—again effecting a saving in material and labour.

Product—and package

BOOK-ENDS AND THEIR CARTON WERE DESIGNED TOGETHER

MOST PEOPLE WHO use book-ends, in home or office, are soon forced to the conclusion that they are not as efficient as they might be. To give adequate support to books of large page-size, the book-ends themselves need to be inconveniently large. . . . If they are to be easy to move when a book is withdrawn from between them, they should slide smoothly—but at every other time their function requires that they should not slide at all. . . .

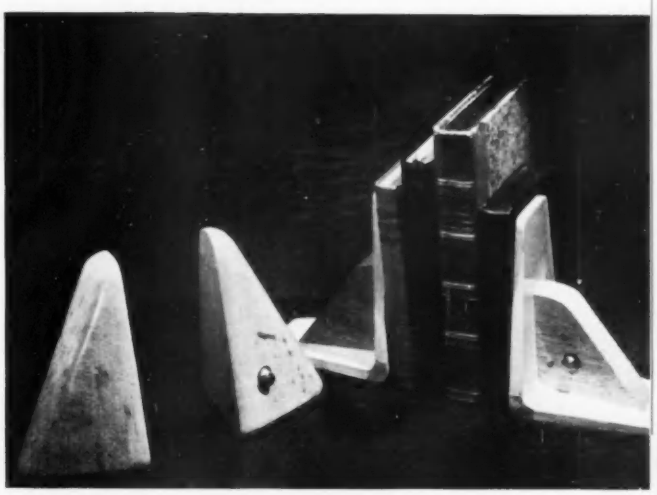
To avoid such snags as these, a new type of book-end has been invented in which the two ends are connected by a steel spring, which lies quite flat underneath the books. When not fully extended, the "spare" part of the spring is coiled inside a recess in one of the book-ends. Pressure on a projecting stud releases it and enables the two ends to be placed at any required distance apart (up to a maximum of 2 ft. 6 in.). Pressure again, when the books are in position, causes the ends automatically to close-in on them.

Designer was consulted

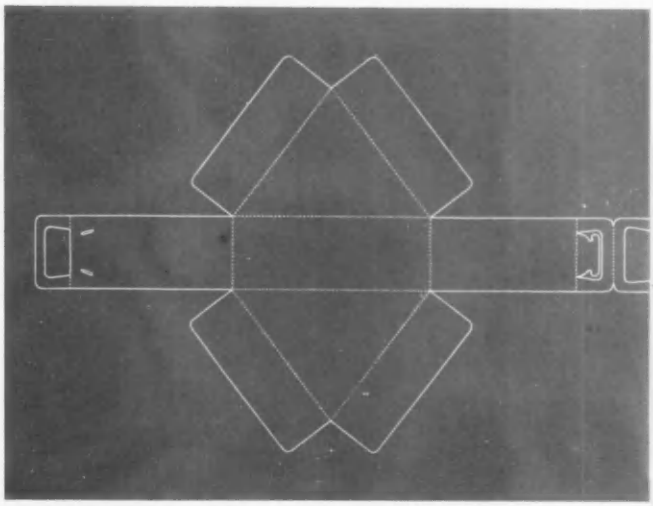
The invention was patented and various experimental models were made, different but in no case particularly distinguished in appearance. At this stage the Miles-Martin Pen Co Ltd undertook distribution on behalf of the makers (Stanpat Ltd) and at the same time an industrial designer was consulted on the appearance of the book-ends and their packaging. The result was a decision to concentrate production on two new models, *No. 101* having a simple curvilinear shape suggestive of abstract sculpture, *No. 102* following traditional book-end lines rather more closely.

A pair of Stanpat book-ends of either model together make a roughly triangular shape, and it was considered that the packing of this might prove a deterrent to retail sales, since it would take up a good deal of the salesperson's time (as well as his firm's wrapping materials). An ingenious package was therefore devised, folding from a single sheet of cardboard to form a shape similar to that of the book-ends themselves, complete with carrying handle.

The pack and trade-mark and the *101* book-ends shown *on left* in our top picture were designed by W. M. de Majo and L. Bramberg, the *102* book-ends by de Majo and R. Barton. The pack is produced by Richard Pye & Co Ltd.



A metal stud projecting on one side only provides the sole outward indication that Stanpat *book-ends are not of solid wood construction but joined by a spring, part of which is concealed inside. The two models retail at* 33*s* 11*d and* 36*s* 8*d including tax*



From a single piece of cardboard, cut and scored in one operation to the shape shown above, is made-up the close-fitting carton for a pair of Stanpat *book-ends. It is printed in a single colour (deep wine-red), with lettering and trade-mark in white*

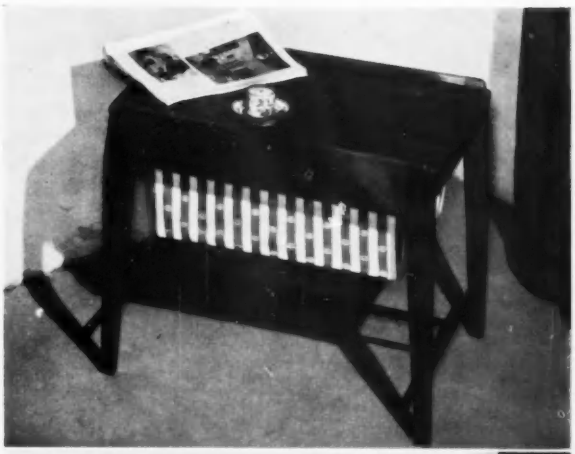
Three ideas for new furniture

CONVENIENCE AND VERSATILITY were the main considerations behind the design of these three new pieces of low-priced furniture. In this sense they are truly contemporary, for furniture must in each generation match the domestic economy and the scale of the rooms. The need today is for pieces which may serve more than one purpose, which are compact and easy to keep clean, which can be made economically in quantity and which can therefore be sold at a reasonable price.

The "dumb-parlourmaid" trolley and the combined dressing-table–writing-desk–chest-of-drawers are prototypes; the sewing table is already on the market. All three were designed by Frank Austin, FSIA, and Neville Ward, B Arch, ARIBA, MSIA, and were shown at the *Daily Mail* Ideal Home Exhibition in a house erected by the Ministry of Health and furnished by the Council of Industrial Design. The wood in each case is mahogany treated with clear cellulose to protect but not to obscure the natural grain and colour. *P.R.*

An electric hotplate is built into the laminated plastics top of this compact "dumb-parlourmaid," which is designed for easy serving at table or for coffee and sandwiches in the living-room. The melamine-surfaced laminate, with an aluminium foil interlayer, is used again for the middle shelf and is remarkably heat and scratch proof. The bottom shelf is intended for used crockery. The small cutlery drawer is partitioned for knives, forks and spoons. The well at the back of the trolley is for bottles. (Made by Alfred Cox Ltd of Corsham Street, London N 1.)

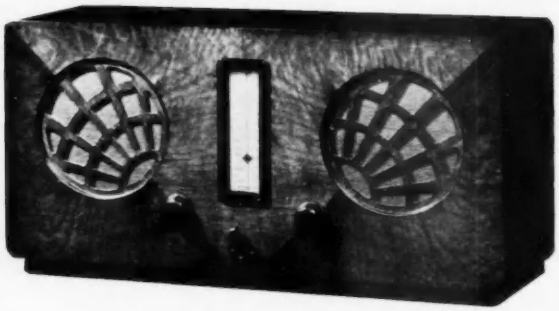
This three-in-one chest was designed primarily to meet the problems arising from the raising of the school-leaving age, though it would fill a need in many one-room flats and bed-sitting rooms. Local authorities are encouraging the use of a study-bedroom. The top drawer of the chest has a fall front which, when the drawer is opened, extends the area of the fitted writing desk on the right and of the dressing-table section, with folding mirror, on the left. With minor modifications this piece could be brought within the Utility price range. (Made by D. Meredew Ltd, Letchworth.)



This sewing table is an elegant contemporary adaptation of a popular and practical piece of Victorian furniture. The sliding top is useful in all positions. The sensible-sized bag, of stout printed cotton, will hold plenty of work. The fitted tray is divided for cottons, needles, buttons, etc. The whole piece is very light so that a woman can easily move it. (Made for and marketed by Primavera, 149 Sloane Street, London SW 1.)

Radio in tune with the times

From the cabinet shown *on right*, McMichael Radio advanced to the prototype *below*; and from that, with very slight modifications, the production model shown on DESIGN'S front cover was evolved



THESE PICTURES OF old and new McMichael twin-speaker radio sets will already be familiar to readers of *Good Design, Good Business*. The story of the design of the new model (by Louis Gregory, of Sir William Crawford and Partners Ltd) was told in that book by John Gloag. To his story we can now add a sequel. With only slight changes, which were considered desirable for technical reasons, the set went into production in mid-1948. Its price (£45) means that today it is virtually in competition with television sets, as well as other radio sets. In its own price-range it has sold successfully—on the Continent as well as in the home market. Modifications in the production model (*see front cover*) are: front veneered in two bands instead of one; pilot lights omitted from each end of control panel.

Exhibition of Flexible Packaging Materials

IT IS AS true of packaging as of any other industrial process that the production of well-designed goods involves, basically, the intelligent use of the right materials. The Council of Industrial Design plays a part in assisting manufacturers and designers by presenting, from time to time, small technical exhibitions concerned with specific branches of industry, largely with the intention of providing a service to industry, but also to indicate what can be done by co-operation in industry. The first of these—an exhibition of synthetic boards and plastic laminates—was held last October. The second—a display of flexible packaging materials—will be held from 3 to 31 May in the Council's small exhibition hall at Murray House, Petty France, London, SW 1. Only flexible materials (such as papers, foils, plastic films) are included in this display; rigid materials, as used in crates, drums and cans may be covered at a later exhibition.

New processes on show

The exhibition has been organised jointly by the Council, the Printing, Packaging and Allied Trades Research Association and the Institute of Packaging. Exhibits from over 60 firms will represent some of the more interesting materials and processes in current production, and will include some recent developments to be shown publicly for the first time. One of these, a Vapour Phase Inhibitor, is a material which can be impregnated into wrapping paper, and may provide the solution to many problems involving the preservation of metals by effectively preventing corrosion *even though the wrapping is not hermetically sealed*. Another product to be shown is a seamless tubular sack, with advantages of its own, woven on a circular loom. A third exhibit shows durable patterns in several colours on PVC and other plastic sheets produced by a transfer process. Other exhibits include specimens showing packaging methods used by the Services, wet-strength papers, plastic films, plastic dips, metal foils and collapsible tubes.

The display is not intended to be comprehensive, but it is hoped that the exhibits will be of wide interest to all who use packages or have packaging problems, and that the exhibition will serve as a pointer to one aspect of the service that could be provided by a permanent Packaging Design Centre.

Manufacturers visiting the BIF (2 to 13 May) will note that an overlap of dates makes it possible for them to see the Council exhibition also.

C. F. B.

TEAMWORK IN INSTRUMENT DESIGN . . .

saves time and labour and improves finish

INDUSTRIAL DESIGNERS "must demonstrate their ability and their willingness to work as members of a team," and manufacturers "would welcome improvement of their products by the addition of new experience and talent" to their design teams: so writes Mr A. Whitaker on another page of DESIGN. On this page is illustrated a new optical instrument which adds topicality to his argument.

It is a *projection attachment* for a Wickman profile grinding machine. Without such an attachment, the operator of this machine would have to observe the accuracy of his work by peering into a microscope eyepiece: with it, a magnified image is projected onto a ground-glass screen $7\frac{3}{4}$ inches in diameter, appreciably reducing the strain on his eyesight and helping him to achieve higher precision.

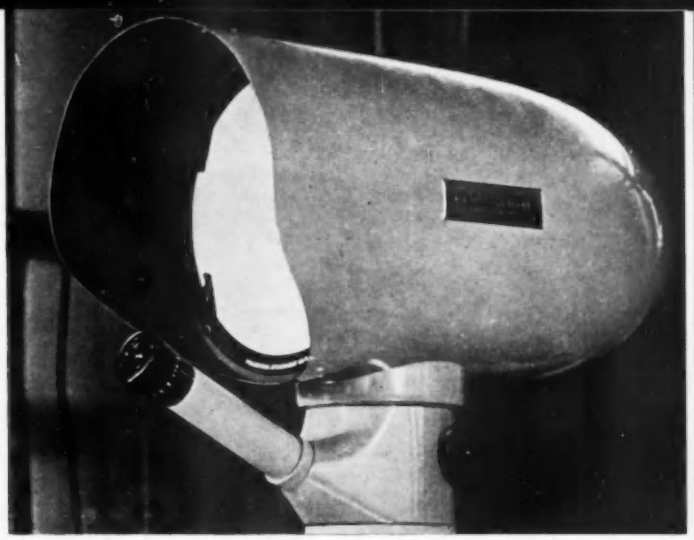
Makers of the instrument are Taylor, Taylor & Hobson Ltd, of Leicester—who for some time have maintained close and friendly relations with the Leicester College of Art, keeping in touch with the design development work going on there. When problems arose in the design of the hood that forms a conspicuous part of the projection attachment, it was therefore natural for T. W. Clifford, T T & H development engineer, to discuss them with Kenneth Holmes, Principal of the College, and N. R. G. Poynton, head of the Metalwork department. What is significant is the fact that these industrial designers were not asked to discuss aesthetics only but *design in relation to production methods.*

It was at first intended to make the hood in the form of magnesium-alloy castings, but this would have been an expensive method because the cost of pattern equipment (£30) had to be spread over an initial production batch of 25 only. Considerable machining processes would, moreover, have been involved, and—in Mr Clifford's words—"it would have been a very expensive job to fill the exterior of the castings to give a sufficiently smooth finish for the high-grade enamel providing the final coat."

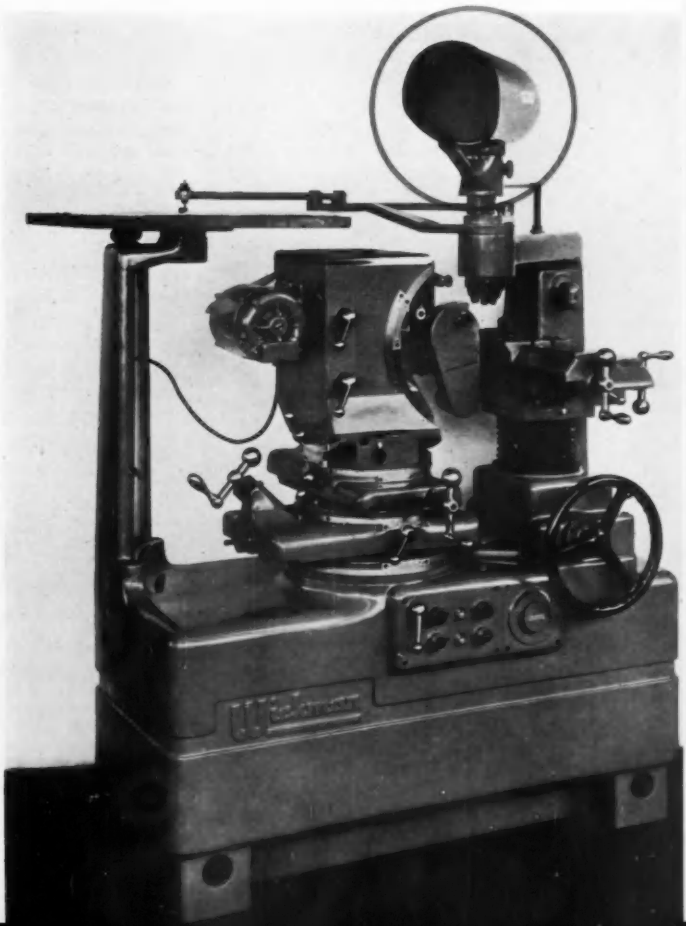
The designers therefore considered the possibility of spinning the hood in brass, and a prototype was spun in the College workshops. Brass was chosen in preference to aluminium because the complete unit had to be fabricated from three different spinnings which had to be sweated together, and in addition, a further turned ring had to be sweated into the inside.

It was found practical to use brass sheet of 1/32-inch thickness, instead of the 5/32-inch of the proposed

Continued overleaf



Spinning *this projection-attachment hood in brass, instead of casting it in light alloy as originally proposed, reduced costs of tooling and finishing. A Taylor-Hobson attachment, it is seen below* in situ—*wholly in keeping with the Wickman profile grinding machine for which it was designed.*



castings; consequently the use of brass instead of a much lighter alloy did not appreciably alter the weight of the instrument. The prototype proved satisfactory and T T & H decided to go ahead with production in brass, using the fabricated spinnings. The tool cost of course was almost negligible in comparison with the cost of the pattern equipment necessary for castings. Moreover, the surface finish on the exterior of the hoods was so good that practically no filling was necessary, and a considerable saving was effected in the final painting process. The cost was £11 for each unit, using spinnings: if castings had been used, it would have been £19—including machining, finishing and enamelling in either case.

In short, the results of intelligent co-operation in design were reduced costs, reduced production time—and a better-looking instrument.

Finnish tapestries shown in London

A SMALL BUT memorable exhibition, little publicised, has just been held at the Anglo-French Art Centre (29 Elm Tree Road, NW 8). Mrs Eva Anttila, Finnish hand-weaver, brought over a number of her own woven pictures and a collection of her water-colour drawings.

To many, the post-war French tapestries came as a shock and a stimulus; Mrs Anttila's work does not shock, and it refreshes rather than stimulates. It possesses a quality of exquisiteness not attributable alone to the lovely colour, the expressive textures, the gentleness and sense of mystery in the design, but to a combination of all these. Her subjects vary from pure landscape, usually in a soft and serious mood, to subjects in which moving figures are felt rather than seen, and colour emphasises the expressiveness of the shapes. Certain smaller tapestries are almost portraits, although features are only indistinctly visible and there emerges an essence of human mood rather than the impact of a person. The tapestries are of interest to weavers by reason of unusual eddies and compressions worked out as an element in the design in various thicknesses and textures of hand-woven yarn. *C. G. T.*

NEW BOOKS IN BRIEF

The English Interior 1500 to 1900 by Ralph Dutton. Developments in style through four centuries are traced and analysed. Plans and diagrams and many excellent illustrations including seven colour plates (Batsford, 21*s*)

The Ornamental Designs of Chippendale by R. W. Symonds. Bilingual, with French and English text, and a selection of eight plates from the now rare Gentleman and Cabinet-Maker's Director, 1762. (Tiranti, 7*s* 6*d*)

An Introduction to Colour by Ralph M. Evans. A detailed study of colour in its physical and psychological aspects, from an American viewpoint. Illustrations include colour and black-and-white plates, diagrams and charts. (Chapman & Hall, 36*s*)

Painting for Welfare and Efficiency. A report by a paint manufacturing firm on colour application in buildings, with specifications and three-dimensional illustrations of room colour-schemes. (Smith & Walton Ltd, 10*s* 6*d*)

Shops and Stores by Morris Ketchum Jr. A practical approach to American store design. Well illustrated and comprehensive text. One of the Progressive Architecture Library series. (Reinhold, New York, 60*s*)

Transport by Land edited by Paul Redmayne, MA. Third volume in the "Changing Shape of Things" series. A graphic essay on the changing form of vehicles during the last two thousand years, the consequent social changes and development of roads and inland waterways. Many photographs and drawings. (John Murray, 8*s* 6*d*)

British Standards for the Automobile Industry. Detailed and comprehensive handbook in seven sections bringing together the many standards of direct interest to the automobile and allied industries. Includes some American standards. (British Standards Institution, 15*s*)

Technical Metalcraft for Schools by J. R. Ferguson, M Coll H. A detailed course of instruction in technical metalwork with both hand tools and machine tools—suitable for apprentices and older craftsmen alike. Illustrated with diagrams and practical examples. (Batsford, 7*s* 6*d*)

Roman Lettering by L. C. Evetts. A reprint of a monograph, first published in 1938, which traces the development of classical Roman lettering from the second to the present century and gives practical details for the lettering artist. Well illustrated. (Pitman, 10*s* 6*d*)

Women's and Children's Garment Design by W. H. Hulme. Authoritative and well-illustrated reference book, of practical value to the dress designer and teacher of design. "Do's and dont's" for every type of female figure. (National Trade Press, 21*s*)

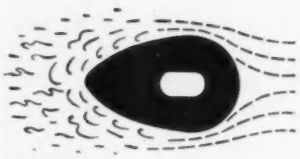
British Steel Products. The first number of an illustrated export journal whose aims are to bring the vast range of British manufactures fabricated from steel to the attention of the overseas buyer. (The British Steelmaker Ltd, 7 Chesterfield Gdns, London W 1, 25*s* a year) *S.K.L.*

DISCUSSIONS ON MANAGEMENT AND DESIGN

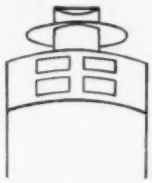
The Council of Industrial Design and the Federation of British Industries are arranging a series of discussion meetings, with typical case-histories, on the relationship between management and design in various industries manufacturing consumer-goods. Admission will be by invitation, obtainable from the Industrial Design Section, FBI, 21 Tothill Street, London SW 1.

The first of the series, on *automobiles and their accessories*, will be held on Thursday 19 May at 2.30 p.m., in the Council Hall of the FBI. Speakers: Mr J. R. Rix, Technical Manager, Austin Motors Ltd; Mr A. Baker, Styling Engineer, Joseph Lucas Ltd. Dr R. S. Edwards, Chairman of the Council, will take the chair.

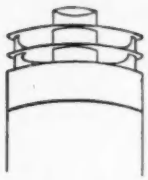
The second discussion will be on *household equipment and domestic appliances*: speakers, Mr F. Winstanley of GEC and Mr Leslie Hardern of the Gas Light and Coke Co, with Mr G. W. Lacey (British Aluminium Ltd), a member of the Council, as chairman. Provisional date: Friday 10 June.



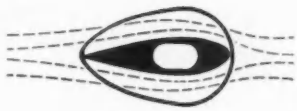
THIS is what happens to the air-stream around the top of a ship's funnel of conventional design.



But with this improved design in a new vessel by Thornycroft's...



... or this later development (on the same principle) ...



... the air-stream is smoothed out, and the after part of the ship is kept free of smoke and grime.

Smoke-flow controlled

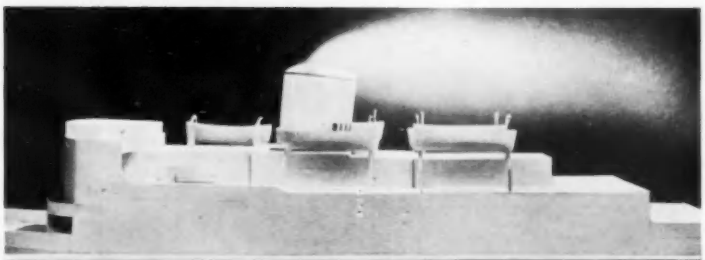
THE TOP OF a ship's funnel is not perhaps the most obvious place to look for innovations in design. Yet the funnel of the passenger and cargo ship *Commandant Queré* has been fitted with a new type of cowl designed by Thornycroft engineers. This prevents smoke and fumes from drifting over the after part of the deck, to the discomfort of passengers and crew—a fault often encountered in modern steam and diesel ships with their broad, squat funnels (*necessarily* broad because they house tanks, silencers and other services as well as the funnel proper).

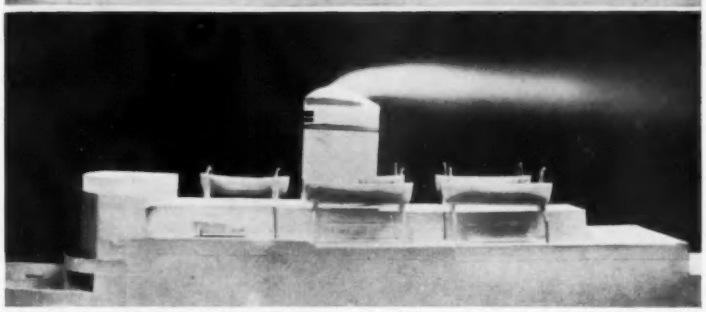
The unusual shape of the Thornycroft funnel top is the outcome of wind-tunnel tests which indicated air flow and smoke trail at different wind velocities and directions, and showed that to avoid downwash the uptake duct must be surrounded by a correctly streamlined cowl which enables the air streams immediately below the issuing gases to close-in smoothly.

In the new design, these air streams are kept horizontal by the use of air intakes at the front of the funnel casing, with horizontal stabilising plates extending back from them. The displaced air need only flow round a narrow inner funnel of streamline cross-section instead of having to eddy-out, with much greater disturbance to its flow, round the whole oval casing. The success of the new device does not depend upon the smoke issuing from the funnel at a high speed, and therefore no additional draught is required. Moreover, the high smoke level is maintained when the wind is ahead or astern, or blowing from any quarter within about 30 degrees of the fore-and-aft line.

So far the *Commandant Queré*, built in Britain for a French line, is the only ship fitted with the new funnel top, but later Thornycroft ships will be fitted with it or a further improved design, embodying the same principle. This is one among many experiments which have been made in recent years (and are still being made) to abolish the nuisance of uncontrolled smoke trails: almost every new liner built since the end of the war has some unusual feature in its funnel design.

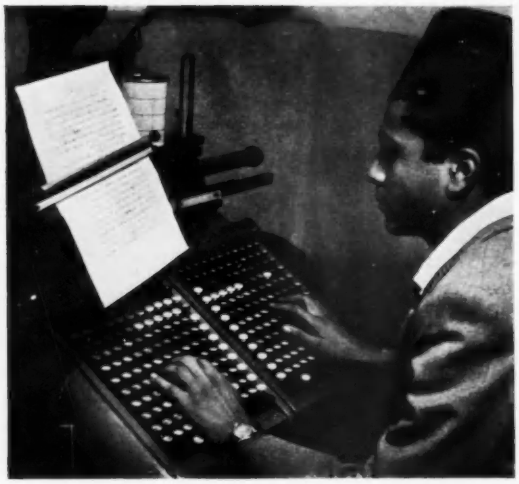
The cowl on top of the Commandant Queré's *funnel is streamlining in the correct sense of this much-abused word.*





Cardboard models show smoke drifting from a conventional funnel (upper picture) *and flowing straight back, clear of the after part of the ship, in the Thornycroft design*

Britain designs type for the East...



Designed *for the world of Islam, the new Monotype face* (below) *has a calligraphic beauty of line independent of language*

وإنا لعلى يقين من أن هذه التحسينات التى أدخلت على الطباعة العربية ستكون فى السنين القادمة من أكبر العوامل على ازدياد التوسع وانتشار اللغة العربية فى كل مكان .

TO A LAYMAN there is always something fascinating in the sight of a Monotype composition caster in action, producing metal printing type apparently without human aid or control. Even the more *blasé* printers stopped to look at a caster which was seen working at the British Industries Fair in 1947; for it was fitted with a *reverse* delivery attachment, made necessary because it was casting Arabic type—and Arabic reads from right to left.

The type-face which thus made its first public appearance in Britain had been cut, during the war, as the first Arabic script for the Monotype machine. It was realised that in design it fell short of perfection, and having gone so far, the Monotype Corporation decided to go a stage further. After consultation with printers, publishers and other authorities of the Islamic world, they produced a second Arabic type. One size of this (Monotype Arabic Series 549) was cut between 1945 and 1948; two more sizes have now been cut, the work involving the engraving of a total of 924 steel type-punches.

The freedom and beauty of Arabic penmanship have not been lost in bringing the new design into the realm of mechanical typesetting; of its 308 characters, no less than 90 *kern* (that is, have strokes which overlap the shoulder of the adjacent character). The resulting calligraphic quality is evident in the specimen reproduced here—a line-block reproduction from a type pull, in the same size as the original. The Arabic quotation is a message of greeting, from a folder which was presented to guests at a party held in Cairo to launch the new type-design.

Compagnie des Propriétaires Réunis

FONDÉE EN 1821

1949

AU seuil de notre 128e exercice social, la Direction de la Compagnie remercie très sincèrement tous ses collaborateurs pour la ténacité et l'ardeur avec lesquelles ils ont poursuivi leur effort en vue d'apporter de nouvelles affaires et de revaloriser leur portefeuille. Elle formule le vœu que l'avenir justifie la confiance qu'ils ont placée dans la Compagnie et réserve à leurs efforts tout le succès qu'ils méritent.

La Direction de la Compagnie présente à tous ses collaborateurs et à leur famille, si souvent associée à leur labeur, tous ses vœux de bonheur et de réussite.

... and print for Belgium

AN UNUSUAL COMMISSION has recently come the way of Richard Lonsdale-Hands Associates: the redesign of all the printed matter used by a Belgian insurance company. This company, established in 1821, is at present managed by Yves Hamoir; and it was to London that Monsieur Hamoir turned when he decided that its print should be given the "family resemblance" which characterises modern schemes of package design, without losing the formal character expected of insurance documents.

A complication that emphasised the international flavour of the job was the need for every item to be designed for French and Flemish text. The company itself is the *Compagnie des Propriétaires Réunis* to some of its customers, the *Maatschappij der Vereenigde Eigenaars* to others.

As a further complication, all the printing was to be undertaken in Belgium—and not necessarily all of it by the same printers. It was not practicable, therefore, to specify the type-faces to be used throughout. On the letterheads and envelopes printed in French, the subsidiary wording is in Perpetua Bold capitals in accordance with an exact specification by the designers: elsewhere,

their layout has been followed in the best type-faces available.

Most conspicuous feature of their work is the distinctive display-line which they have evolved for all the company's many kinds of print. This consists of the full name in French or Flemish, superimposed on the French initials, *PR*. The name is printed in black as a line of formal script; the initials, in red, are in-lined Roman capitals. Red and black are used on all pieces, with buff as an additional colour on some.

The range of printed matter thus re-designed is extensive, including insurance policies and certificates, proposal forms, letterheads and envelopes of various sizes, as well as booklets—the title page of one of which is reproduced at foot of p. 18.

Fire policy of the Belgian insurance company before (left) *and after redesign. This is the Flemish version. Printed in black and red*

MIDLAND PRINTERS REDESIGN THEIR MAGAZINE

COBBLERS' CHILDREN are notoriously worst shod, and the journals of printing-trade associations are seldom among the best examples of printing design. An exception is worth recording here: the *Magazine of the Midland Master Printers' Alliance*, which was already above average in this respect, has been further improved recently.

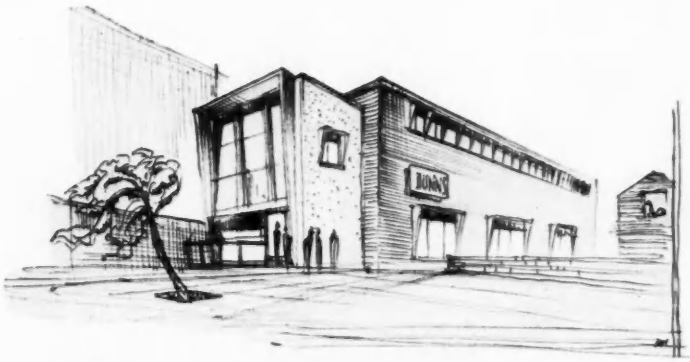
Typical double-page spreads are shown on right; *above*, before, and *below*, after redesign. The journal was formerly set in 10-point Plantin with Perpetua Bold headings and is now in 12-point Bembo with Gill Extra Bold headings; but these changes in type-faces (which may not be universally considered an improvement) are less important than the adoption of a rather more open style of layout than formerly, and the introduction of a second colour on many pages.

Main credit for the redesign is due (states Mr F. Fielding, Editor) to C. H. Gee & Co Ltd, Leicester, printers of the *Magazine*. *A. D.*

A POST-WAR SHOP

Contemporary setting for products of contemporary design

Variety of wall treatments is an interesting feature of Dunn's new Bromley store. In some showrooms they are of bare brick, painted in light colours. Elsewhere, wood-panelling and draped fabrics provide effective backgrounds for the well-designed goods displayed; above, *wallpapers by contemporary designers are shown by using a different pattern on each wall panel.*



Externally, the new building (opened this year by Lord Sempill) is in striking contrast with the old shops around it. Inside, Dunn's make a point of employing only staff who appreciate good design and take an interest in it. Some of the furniture sold here is of the firm's own design and making. Their workshops—destroyed, like their store, in the blitz*—are in the process of rebuilding.*

IN 1710, a small shop selling furniture and furnishings was opened by a Mr Dunn in the country town of Bromley in Kent. As the years went by, the firm expanded with the town—today Bromley is a suburb of London, twenty minutes' journey by train from Victoria. By 1930 the premises had grown considerably and covered a large area in the Market Square. Dunn's was then a shop selling furnishings for the home but catering for the good-class reproduction trade.

In 1932, Geoffrey Dunn joined his father in the business, bringing with him new ideas which led to a display of one or two lengths of modern textiles and some newly-designed pottery. This departure from past practice eventually, after struggles and tribulations, produced business and in time Dunn's of Bromley became known as one of the few shops where well-designed *and inexpensive* furniture and furnishings were available. As a result, their custom has grown, not only among local people but from London and out-of-town shoppers.

Early in the war, their premises were entirely wiped out by bombing. By acquiring a very small shop next door they were able to carry on their business under very cramped conditions.

Now a new Dunn's of Bromley has been opened. It is the first of future buildings; its two main walls, of brick, remain from the original building; the front, back, roof and window frames are of concrete.

Inside one gets a feeling of spaciousness. The centre and far end are open to the roof and the first "floor" is in the form of balconies supported on metal columns. At the far end is a concrete mullioned window, occupying the full width of the building and reaching to the roof. As this window looks out on an open blitzed area, the feeling of spaciousness is accentuated.

In the shop are many examples of contemporary design in furniture, textiles, wallpapers, rugs, pottery, lamps and books. Unit furniture and upholstered pieces designed by Dunn's and sold in the Utility price range are shown. As the re-building of their workshops progresses, there will be a still wider choice.

This modern building in an old market square, surrounded by genuine old and Tudoresque modern shops, is a fine effort by a go-ahead firm and a fine job by the architect Bertram Carter, FRIBA.

A. G. M.

DESIGN AND PRODUCTION

Facts about materials and techniques—background knowledge for the designer—summarised from some recent booklets

Galvanising, the familiar process for protecting iron and steel, is described, and its success explained, in *Hot Dip Galvanising and Rust Prevention*, a booklet published by the Hot Dip Galvanizers' Association, Lincoln House, Turl Street, Oxford. Between the zinc surface and the steel is formed a boundary layer of alloy, and even if this coating is penetrated, the voltage set up between zinc and iron is such that only corrosion of the zinc can occur. *Above*, steel window frames emerging from the bath of molten zinc.

Holoplast *Technical Manual* is a model of the kind of data-book that material suppliers should provide but seldom do. It includes essential facts about Holoplast, recommended uses, advice on methods of manipulation and suitable adhesives, photographs illustrating successful applications, and 19 pages of blueprints giving constructional details of shipbuilding, furnishing and architectural uses of the material. (Holoplast Ltd, New Hythe, nr Maidstone, Kent.)

Aluminium Alloy: various uses of Hiduminium are illustrated in excellent photographs, with brief technical data, in *Commercial Castings in Hiduminium*, one of several recent publications from High Duty Alloys Ltd (Slough, Bucks). Shown *below* is the frame of a chair by Goodearl Bros Ltd, High Wycombe, made in gravity die-castings of Hiduminium 20. (Registered design and patented). Legs are of half-round shape, $1\frac{1}{2}$ inches at top tapering to 1 inch at bottom.

Copper *and its Alloys in Engineering and Technology* has been issued by the Copper Development Association (Grand Buildings, Trafalgar Square, London WC 2). Of value to designers will be the 9-page "Guide to the selection of alloys" which is included in this booklet; it lists in tabular form the most suitable kinds of copper alloy for use in a wide range of products—from ships' propellers to shopfronts. Illustrated *above* is a drinking set pressed and spun from copper—an interesting example of design manifestly influenced by the production technique employed.

A buoyant lining

Lightweight *and water-resistant, Tropal gives warmth and buoyancy to garments lined with it. Shown here is a yachting jacket by Louis London & Sons*

TROPAL, THE BLANKET-LIKE material made of carefully selected and treated Java kapok fibres, has been used for lining a yachting jacket which, it is claimed, will keep the wearer afloat for many hours longer than would otherwise be possible.

This material, manufactured by Airpak Ltd, is already well known for use in aircraft and refrigerators as an insulating material, in clothing because of its lightness and warmth, and in RAF flying suits because of its buoyant properties. Its use as a buoyant material for civilian clothing is new to this country, however.

The lining extends throughout the sleeves and around the body; the latter part has been made somewhat thicker to improve buoyancy. Tests made on the material show that it will support over 30 times its own weight in water. To allow a margin for safety, however, the manufacturers have incorporated three times as much Tropal as would be required to keep a man afloat under the most favourable conditions. Moreover, by welding the fibres into a cohesive blanket the chance of their being washed away should the outer covering be torn is virtually eliminated.

Besides being buoyant the jacket is highly resistant to water and damp; it is, therefore, effective as a protection against rheumatism and other ailments arising from damp and exposure to inclement weather.

The jacket is manufactured by Louis London & Sons, and the retail selling price will be from 10 to 12 guineas according to the quality of the outer cloth. Though designed primarily for yachtsmen, it is equally suitable for others who require warm but light clothing, whose occupation involves the risk of immersion in water.

Substitution: steel for wood or wood for steel?

IN MANY PRODUCTS designed in Britain during the last few years, materials other than wood have been used where wood might have been expected. In some instances these other materials (steel, light alloys, plastics, etc) have been chosen because they were better than wood for the job in hand; in others they have been used because wood was not available.

Its non-availability, moreover, was not a result of a world shortage of timber but of Britain's shortage of foreign exchange, which made it necessary for this country to cut down her overseas purchases of timber to the minimum. Whether it is now desirable to continue this policy or to reverse it is open to question. Mr Harold Wilson, President of the Board of Trade, was recently reported as saying that "during the war, and after, when timber imports had to be severely restricted, the substitution of steel for timber was pushed hard. The Timber Development Association had produced a booklet on the case for putting the process into reverse, and he had asked a number of Government departments and steel users to review its proposals" (*The Times*, 24 March).

In the booklet referred to by Mr Wilson, the TDA asserts that many of the materials which have recently been used instead of timber, in a variety of applications, involve complex and costly manufacturing processes whereas timber is "manufactured by nature free of charge" and needs relatively little processing.

The TDA lists 128 products in which timber has been replaced by steel or concrete, ranging from pigpens to ships' fittings—and moreover does not even attempt to list the many instances in which other materials, such as light metals and plastics, have been the substitutes for timber. The effect on product design would soon be evident if the nation's economic policy was modified on the lines now recommended by the TDA, and more timber became available.

(The title of the booklet referred to above is *The Economics of Timber Substitution*. Copies are obtainable from the Timber Development Association Ltd, 75 Cannon Street, London EC4.—EDITOR)

Notebook

Design and *The Economist*

FOR "DESIGN" to say that a product sells well because it is well-designed—particularly because its *appearance* is good—might be suspect, as coming from a Vested Interest. No such suspicion can attach to views expressed in that hard-headed and wholly businesslike journal, *The Economist*; and readers may be impressed, as we have been, by some comments in a recent *Economist* article on "Tractors for farmers."

Discussing the success of the Ferguson tractor in rapidly capturing a large share of the market, the writer of this article said:

> With outstanding manœuvrability and ease in handling it combines *attractive appearance, which most makers of tractors, overlooking perhaps the farmer's preference for equipment that pleases the eye, have by comparison neglected.* . . .

The italics are ours, but the comment, remember, is *The Economist's*. Nor is its validity affected by Ferguson's difficulties in certain overseas markets, which have been rather widely publicised of late: these are not due to any merits or demerits of design, but to national economic policies which (unfortunately) even the best design cannot modify.

Lethargy among U S printers

ALTHOUGH THERE ARE some 37,500 plants in America owning printing equipment, only 265 people —not all of them printers—submitted material for an exhibition of *Printing for Commerce* held in New York early this year; and of the 2000 entries submitted, only 96 were selected as reaching the standard of design and execution required for the exhibition. "Such a small number of entries . . . is an indictment of the lethargy of the entire industry," Biruta Sesnan wrote, apparently with every justification, in the *American Printer*.

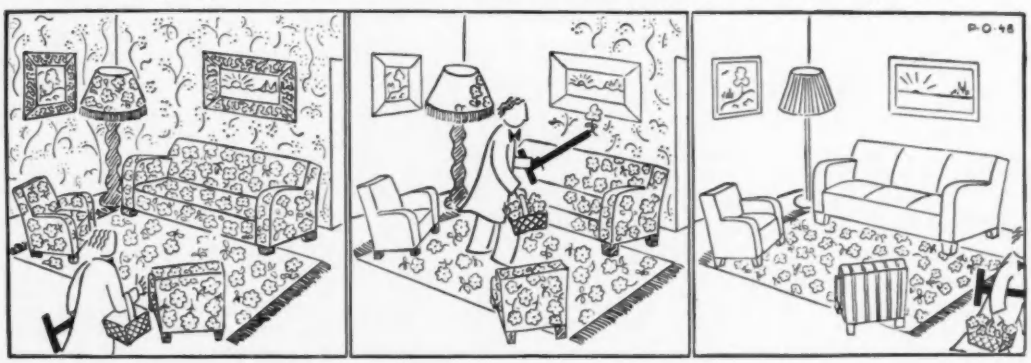
Each piece of print submitted was assessed on the merits of its design, typography, reproduction and printing. Many pieces were rejected because of unsuitability of the paper for the types used. To quote Mrs Sesnan again, "if this analysis of the pieces submitted for the exhibition reveals any one thing, it shows the glaring need for closing the gap between the designer on the one hand and the printer on the other."

The "attractive appearance" of the Ferguson tractor, noted by The Economist, *is as evident in its natural surroundings as in the showroom*

Product and package costs

THE PHOTOGRAPHS OF TVA reproduced on pages 6 to 9 as examples of *Design for Service* come from the London office of the United States Information Service, whose cooperation we gladly acknowledge. The drawing of a car which exemplifies *Design for artificial obsolescence* in the same article is by Miss H. Cloos.

DESIGN'S *cartoon this month is one of a series drawn by Per Ovrum, advertising manager of Tannum AS, Oslo (furnishers and decorators), appearing in his firm's advertisements. The little man with the bow tie is common to all cartoons in the series*



Created by
Kay Bee
IN MOYGASHEL
This Utility Suit in "Moygashel" pure linen, from a print exclusively designed by Leicester School of Art, is one of the many surprises in the 'Kay Bee' selection of Suits and Dresses for Spring. It carries the "Moygashel" refresher service. Sizes 38, 40 and 42 hips.
Stocked by leading fashion houses.
Write for address of nearest stockist to :—
KIMBERLIN BROWN & CO. LTD.,
Charles Street, Leicester
or 1, New Oxford Street, London, W.C.1.
KAY BEE SUITS THE BEST!

This recent press advertisement for Kay Bee *suits provides an unusual example of a manufacturer publicising the designer. It suggests, also, unusually close liaison between art-school and local industry: a liaison which in this instance has existed for a number of years.*

That article comments on the danger of attaching a disproportionate importance to packages, in relation to the products they contain. An apt footnote to the comment is provided in the March issue of *Sales Appeal*, which quotes, from an American source, an analysis of the costs of a tube of toothpaste retailing at 41 cents. Out of this sum *four cents* is the cost of the toothpaste; the cost of packaging is as much, and the cost of advertising twice as much. The not inconsiderable remainder of 25 cents is divided between manufacturer's and retailers' overheads and profit.

Carpets and markets

"OUR DESIGNS and colourings were very well received." Thus Mr C. P. Crossley, chairman of John Crossley and Sons, carpet manufacturers, speaking of a recent visit to Australia and New Zealand by one of his colleagues.

In a reference to the North American market, Mr Crossley emphasised certain points which no doubt apply equally to some other British goods besides carpets. "While there is still an excellent demand for our particular products in Canada," he said, "competition in the United States is becoming very severe. . . . It is becoming extremely difficult to sell anything in this market except for certain special lines which do not readily lend themselves to the mass-production methods current throughout America."

The *Bauhaus* broadcasts

PROBABLY MORE PEOPLE in Britain than ever before are now familiar with the name and achievements of the Bauhaus (Weimar and Dessau, 1919 to 1928), thanks to the series of talks on this subject which the BBC recently broadcast in the Third Programme. Perhaps even more valuable, because it included illustrations, was the series of articles reprinting these talks which appeared in three issues of *The Listener* from 17 March onwards.

Werkbund into action

FROM COLOGNE comes news of an exhibition to be held in that city from 14 May to 3 July by the Deutscher Werkbund. This organisation was established as long ago as 1907 and many design associations in other countries can look upon it as the exemplar which they followed more or less closely. The exhibition will be the first conspicuous sign of the Werkbund's post-Hitler revival.

Staff trainers' conference

A CONFERENCE ON DESIGN for retail staff trainers is due to be held, under the auspices of the Council of Industrial Design, at Bletchley (Bucks) from 9 to 12 May. Its purpose is to introduce to staff trainers new methods of imparting at least an elementary knowledge and appreciation of design to retail sales staff. It follows the successful conference with Midland retailers held during February.

Nineteenth-century precedent

THE THORNYCROFT ship's funnel illustrated on page 17 serves as a reminder that the problem of controlling the flow of smoke to keep it out of people's eyes was tackled by railway engineers as long ago as last century. One of their attempted solutions seems to have borne some resemblance to the Thornycroft design; on David Jones's locomotives for the Highland Railway, built between the 'seventies and the 'nineties, "the chimney had an outer casing like a ship's funnel, in the front of which was a set of louvres designed to cause an updraught through the annular space surrounding the chimney proper. Its object was to prevent the smoke from beating down over the cab. . . ." (Hamilton Ellis, *The Trains We Loved*).

Three points of view

AUTHOR OF THE article on pages 2 to 5, Mr A. Whitaker was one of the speakers at a luncheon meeting of the Design and Industries Association, London Region. Mr W. C. Whittaker, of Selfridges, spoke as a retailer on this occasion, Mr Christopher Heal, MSIA, as a designer, and Mr A. Whitaker as a manufacturer. Now of Ascot Gas Water Heaters Ltd, he was formerly in charge of domestic appliance design at H M V.

•

It is regretted that space does not permit the publication, this month, of (1) *Letters to the Editor*, (2) *Miscellaneous Advertisements.*

SUBSCRIPTIONS

DESIGN is obtainable by subscription (25*s* a year, post free), which is payable direct to HM Stationery Office, P.O. Box 569, London SE1, or branches, or through booksellers. All correspondence on matters other than subscriptions should be addressed to The Editor, DESIGN, Tilbury House, Petty France, London SW1.

CONTRIBUTIONS

The Editor welcomes contributions and suggestions for articles. Material published will be paid for.

PERMISSION TO REPRINT

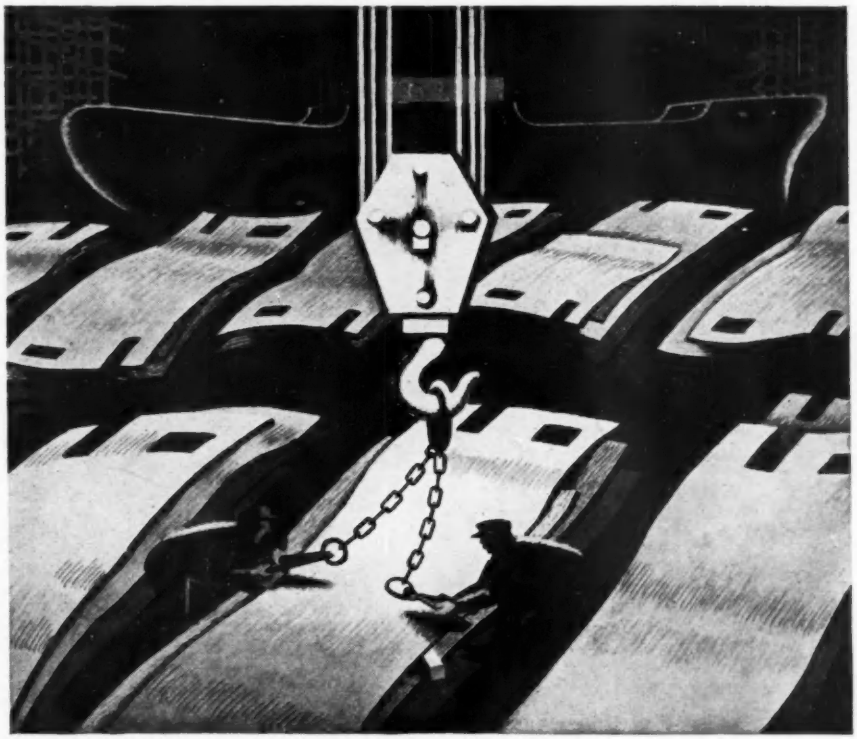
Unsigned articles may be freely reprinted in full or in part, with or without acknowledgment. Permission to reproduce signed articles will usually be given on application.

PHOTOGRAPHS

Copies of many photographs reproduced in DESIGN can be purchased through the Council's Photographic Library (or borrowed by subscribers to the Library Service).

ADVERTISING

Small advertisements can be accepted at 2*s* per line (minimum 6*s*); box number, 1*s* extra. A limited number of display advertisements can also be accepted: details on application.



COLD STEEL

Steel is the skeleton which supports the structure of modern civilization. Great Britain was the pioneer and is still pre-eminent in the production of steel — witness the world-wide fame of the name Sheffield, and such modern British triumphs as the development of manganese and stainless steels. This pre-eminence is in large part due to the work of the British chemist, for steel more than any other metal is the result of close liaison between the foundry and the laboratory. Its manufacture is a matter as precise as the dispensing of a medicine prescription. It is the chemist who evolves the formula, analyses the product during the making and tests the finished article. No more than a dozen years ago British research perfected a method of improving the quality of steel by purifying pig-iron.

Alike for needle and anchor, for the myriad uses of the parent metal and its countless family of alloys, steel is compounded by the chemist. Nor is the chemistry of iron and steel limited to the metal itself, but extends to its by-products and to the by-products of these by-products. In a sense the output of the blast-furnace is pig-iron. By virtue of the chemist the blast-furnace also yields fertilizers, cement, valuable oils and tar; and from tar, eventually organic chemicals, including dyes and medicinal products. It is the chemist's privilege not only to ensure that British steel shall continue to lead the world, but that the transmutation of the raw material shall at every stage render its full quota for the common good.

ICI

IMPERIAL CHEMICAL INDUSTRIES LIMITED

P.R.4

Published for the

COUNCIL OF INDUSTRIAL DESIGN

Tilbury House · Petty France · London SWI (Scottish Committee : 95 Bothwell Street · Glasgow C2)

by His Majesty's Stationery Office

Printed in Great Britain by Benham and Company Limited, Colchester S.O. Code No. 88-1266-4-49*